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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,613	11/04/2002	Yung-Lung Chen	9735-US-PA	2463

31561 7590 04/18/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,613

Applicant(s)

CHEN, YUNG-LUNG

Examiner

Lawrence B. Williams

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Subscripts are unreadable in Fig(s). 1-3. Formal drawings will be required when the application is allowed.

Specification

2. The abstract of the disclosure is objected to because: Examiner suggest applicant delete the word "Figure" on page 14 and delete pg. 14 as well. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
4. The disclosure is objected to because of the following informalities: The line beginning with "The peripheral related ..." in paragraph [0004] of pg(s). 1 and 2 is unclear. Examiner suggests applicant rewrite the claim for clarification.

Appropriate correction is required.

Art Unit: 2611

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 cites the limitation "the signal frequency splitter receiving a radio frequency signal and **filter** of the local carrier signals...." In lines 7 of the claim. Examiner is unable to discern the meaning of this language in the claim. Accordingly, the claims have not been further treated on the merits.

Allowable Subject Matter

8. Claims 1-4 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

The instant application discloses a frequency shift key decoding apparatus, having a frequency divider, a signal frequency splitter, and a demodulator. A search of prior art records has failed to teach a signal frequency splitter comprising:

"n second mixers coupled to the first mixers and the frequency synthesizer to mix frequencies of the radio frequency signal and the local carrier signals to obtain n intermediate-

Art Unit: 2611

frequency frequency-mixed signals, and n filters coupled to the second mixers to filter the n intermediate-frequency frequency-mixed signals F to F to obtain n intermediate-frequency signals” as disclosed in claim 1.

“a plurality of second mixers, coupled to the first mixer to mix the frequency of the radio frequency signal with the frequencies of the first and the second local carrier signals to obtain a first and a second intermediate-frequency frequency- mixed frequency, respectively', and a plurality of filters coupled to the second mixers to filter the first and second intermediate-frequency frequency signals to obtain the first and second intermediate-frequency signals” as disclosed in claim 3.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a.) Asam discloses in US Patent 6,545,517 B2 Frequency Splitter Circuit.
- b.) Meador et al. discloses in US Patent 6,564,039 B1 Frequency Generation Circuit And Method Of Operating A Transceiver.
- c.) O'Connor discloses in US Patent 4,777,449 Threshold-Extension FM Demodulator Apparatus And Method.
- d.) Furukawa et al. discloses in US Patent 6,363,126 B1 Demodulator.
- e.) Carr et al. discloses in US 6,377,315 B1 System And Method For Providing A Low Power Receiver Design.

Art Unit: 2611

f.) Duncan et al. discloses in US 2003/0030497 A1 Integrated VCO Having An Improved Tuning Range Over Process And Temperature Variations.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw
April 3, 2006


EMMANUEL BAYARD
PRIMARY EXAMINER